Adaptive Management Program

3.1 Introduction

This chapter provides a brief background on the program accomplishments over time and includes a copy of the Cooperative Monitoring and Evaluation Research (CMER) workplan and CMER tracker (2006). The CMER workplan presents an integrated strategy for conducting research and monitoring to provide credible scientific information to support the AM program. The CMER tracker shows the status of each CMER project as of June 2007. The major AM effort over the past year has been to bring the results of the desired future condition (DFC) validation project and the perennial stream survey project to conclusion (see section 3.5, Forests and Fish Policy Activity).

This chapter also contains information on specific electrofishing activities. The Services requested information through the ITP permit conditions on electrofishing related to AM. The State developed a form which provides the requested information and has included a copy of the form at the end of this chapter. There were no instances of electrofishing related to AM research between June 5, 2006 and June 30, 2007; however, we have included the completed form for the proposed electrofishing that is scheduled to take place during the 2007 summer season.

3.2 Purpose of Adaptive Management Program

The purpose of the AM program is to produce technical information and science-based recommendations to assist the Board in determining if and when it is necessary or advisable to adjust forest practices rules and guidance in order to achieve program goals, resource objectives and performance targets identified in the FPHCP. As a result, a successful AM program is essential to ensuring the on-going development and implementation of measures that effectively conserve the habitats of species covered under the FPHCP. A full description of the AM program, the components, process, as well as the research and monitoring programs can be found in Chapter 4, Section 4a-4 of the FPHCP.

The current AM program has been formally in place since the adoption of the Forests and Fish Rules in 2001. Schedule L-1 from the Forests and Fish Report served as the foundation for the AM program, and more specifically guides the development of research and monitoring projects described in the 2007 CMER Work Plan (included at the end of this chapter). Key questions - and therefore research and monitoring priorities - are likely to change over time as adaptive management proceeds and new information becomes available. However, the research priorities presented in the CMER Work Plan have not changed substantially since the most recent program prioritization in 2002. Changes to resource objectives, performance targets and research and monitoring priorities, while at the discretion of the Board, would typically be reviewed and agreed to by the Forests and Fish Policy Committee.

3.3 Adaptive Management Program History

Since 2001 the AM program has completed more than 25 projects, many of which have final project reports posted on the AM program website (see section 3.6). A good deal of

the work conducted early on was in support of rule-tools - projects designed to develop, refine or validate protocols, models and targets used to facilitate forest practices rule implementation. These projects did not necessarily result in a final project report or rule change, with the exception of perennial stream survey and DFC projects; the projects did, however, result in a draft report, GIS products, or other types of database. Over the last few years the AM program has focused much of its effort on effectiveness monitoring projects. However, work has recently begun on extensive monitoring and CMER is in the process of scoping an intensive monitoring project. The effort to more fully integrate research and monitoring across spatial and temporal scales will continue in fiscal year (FY) 2008.

3.4 Cooperative Monitoring Evaluation Research Committee Work Plan

The CMER Committee produces an annual work plan that describes the various AM research and monitoring programs, associated projects and work schedule. The CMER Work Plan is intended to inform CMER participants, the Board, Forests and Fish Policy constituents and members of the public about CMER Committee activities. The programs in the work plan have been prioritized based on the level of scientific uncertainty and resource risk associated with the priorities of Schedule L-1in the Forests and Fish Report and incorporated into the FPHCP. CMER has worked to implement the high priority programs first to ensure that the most important questions about resource protection are answered before the less important ones where there is lower scientific uncertainty or lower resource risk. The plan is a "living document" that is revised annually in response to research findings, changes in Forests and Fish Policy objectives and funding.

As a result of the Forests and Fish Policy budget retreat in June 2007, the FY 07 work plan is currently being revised for FY 08, and will be presented to the Board in September 2007. So as to not delay FY 08 project work until September, the FY 08 budget will be presented separately at a special Board meeting in July. Once approved by the Board, the FY 08 budget and work plan will be available on the AM program website. Of the proposed FY 08 projects (~25), approximately eight are on-going projects which have been in place for at least one year or more; one is in the final review stages and the rest are in start-up mode – scoping, study design, or peer review (see the CMER Project Status Report included at the end of this chapter).

3.5 Forests and Fish Policy Activity (June 5, 2006 – June 30, 2007)

Since permit issuance in June 2006, the Forests and Fish Policy group has spent a considerable amount of time attempting to reach consensus on a path forward on the Type N stream prescription and the basal area target for Type S and F streams. These two issues were the result of reports from the perennial stream survey project and DFC validation project.

In response to results of the perennial stream survey project, Forests and Fish Policy recommended the Board remove the basin area defaults within the Type Np Waters rule; the Board concurred and did so in November 2006. At the same meeting the Board asked

Forests and Fish Policy to develop Type N prescription proposals that would address other issues associated with the rule (repeatable, enforceable, and ease of implementation) without compromising functional effectiveness. Such a prescription would be an interim step while AM research on Type N streams continues. Since that time, Forests and Fish Policy has been working to craft interim Type N prescription options. At the June 2007 Board meeting Forests and Fish Policy reported that several options had been developed, but had not yet been completely evaluated for feasibility. The Board asked Forests and Fish Policy to move to the evaluation stage and bring back the most feasible option(s) for consideration as soon as possible.

In late 2005 the Forests and Fish Policy group also recommended the Board consider rule making in response to the Desired Future Condition (DFC) validation project, but did not specify how they should respond. The Board remanded the issue back to DNR to work with Forests and Fish stakeholders in order to bring forward a specific consensus recommendation.

DNR was unable to obtain a consensus recommendation from stakeholders; so, in August 2006 DNR recommended the Board enter rule making on a new basal area target of 325 for all site classes, based on information from the DFC target validation study. The Board requested a workshop on the issue and also requested other options to utilizing basal area targets and a modeling approach to rule implementation. The workshop was held in November 2006.

In June 2007 the Washington Forest Protection Association (WFPA) presented an alternative approach to achieving the basal area of 325. There are two options for landowners within this alternative, one that retains use of the DFC modeling approach to rule implementation and one that does not. The Board accepted the WFPA alternative and re-submitted both the original DNR proposal of the basal area of 325 and the WFPA alternative for 30-day review by the public, the first step in the rule making process.

A special Board meeting has been scheduled for July 2007 to consider moving one or both proposals to the next rule making step. For the interim, the Board asked DNR to work with stakeholders to address concerns with the WFPA proposal expressed during public comment at the June 2007 meeting.

3.6 Adaptive Management Program Website

The AM program website is currently undergoing reconstruction. Soon all active projects will be listed by forest practices rule group along with a project description, progress reports and maps of study sites if available. Completed projects will also be listed by rule group, along with final reports, maps and data, where available. Presenting projects in this way will be consistent with the format of the work plan.

Adaptive Management Program website:
http://www.dnr.wa.gov/forestpractices/adaptivemanagement/

3.7 Electrofishing Report

One of the conditions of the ITPs relates to electrofishing. The Services asked for an accounting of any electrofishing related to AM research. The State developed a form to help collect and provide the information asked for by the Services. The blank form is included at the end of this section.

Electrofishing Activity

There were no electrofishing activities related to AM research over the past year. There is only one project active July through October of 2007 that will be conducting electrofishing related to AM. The completed form describing this project is included at the end of this section.

Template Form

Electrofishing Conducted for Adaptive Management Research
Pre- and Post-Activities Report, FY2007
(as required under the Incidental Take Permit for the Forest Practices HCP)

Pre Electrofishing

1. Name of project:

Date of project implementation:

Primary contact for project:

Names of watersheds where surveys will be conducted:

2. Estimate the number of listed fish or miles of listed-species habitat affected by electro fishing activities:

3. Provide names and qualifications of the staff, contractors, or cooperators who will be supervising the field work:

4. Provide a copy of the operating protocols designed to reduce effects to listed fish while maintaining the efficiency of the surveys and monitoring (operating protocol includes guidelines by National Marine Fisheries Service (NMFS 2000) and any subsequent updates):

Post Electrofishing

1. Document the length of stream-survey and electrofishing activity:

2. Document any listed-fish encounters:

3. Document any effects that rose to the level of incidental take (harm to habitat or listed species) including mortality:

4. List the apparent condition of all listed fish specimens encountered:

***Make sure to submit any Federal and State permits that were obtained.**

Electrofishing Conducted for Adaptive Management Research
Pre- and Post-Activities Report, FY2007
(As required under the Incidental Take Permit for the Forest Practices HCP)

Pre Electrofishing

1. Name of project: Type N Experimental Buffer Study

Date of project implementation: July-October, 2007

Primary contact for project: Bill Ehinger/Marc Hayes

Names of watersheds where surveys will be conducted:

Extreme headwater tributaries to: Willapa River, North River, Wishkah River, Clearwater River, Humptulips River.

2. Estimate the number of listed fish or miles of listed-species habitat affected by electro fishing activities:

0 miles.

3. Provide names and qualifications of the staff, contractors, or cooperators who will be supervising the field work:

Aimee McIntyre, Project technician, Washington Department of Fish and Wildlife.
Jason Walter, Senior Aquatic Research Technician, Weyerhaeuser Company.

4. Provide a copy of the operating protocols designed to reduce effects to listed fish while maintaining the efficiency of the surveys and monitoring (operating protocol includes guidelines by National Marine Fisheries Service (NMFS 2000) and any subsequent updates):

None required. No sampling in streams containing listed fish.

Post Electrofishing

1. Document the length of stream-survey and electrofishing activity:

800 meters total stream length sampled twice yearly.

2. Document any listed-fish encounters:

None.

3. Document any effects that rose to the level of incidental take (harm to habitat or listed species) including mortality:

None.

4. List the apparent condition of all listed fish specimens encountered:
N/A

***Make sure to submit any Federal and State permits that were obtained.**